Thunder Series

GRAPHICS ACCELERATORS

The Macintosh may give us all a tool that helps us do what we do best, but when it comes to prepress color accuracy, super resolution, and processing huge graphics, you need the extra power provided by a Radius Thunder Series™ graphics accelerator. Any Mac can be brought to its most professional level by our most powerful line of graphics hotshots.

Imagine QuickDraw performance up to 20 times faster than the Power Macintosh 8100 VRAM built-in video.* Incredible Photoshop acceleration that supercharges your images, so you're more productive. Work in Photoshop's CMYK mode nearly as fast as in RGB. And the Radius Dynamic Desktop™ gives you pan and zoom features, in addition to hot key resolution switching on the fly.

Radiant prepress color — give yourself the most accurate color fidelity anywhere with Thunder's 30-bit effective color. Choose 16.7 million colors out of a palette of over 1 billion. Plus, you also receive multiple resolution support up to 1600 x 1200. When you pop in any of the Thunder Series' powerhouses, your production and design department will thank you.

ADOBE CHARGE

Super Resolution at Earth-Shaking Speed

Thunder Series Cards
Blow the doors off Power Mac
The Thunder IV GX•1600, Thunder IV GX•1360 and Thunder IV GX•1152 all extend the 24-bit resolution of the Power Mac's built-in-video. Accelerated 24-bit color, built-in Photoshop acceleration, CMYK acceleration, hot-key resolution switching, pan and zoom, Color-Composer and 10-bit DAC add up to make these cards the number one choice for image processing, compositing and illustration.

The fastest Photoshop on the planet
The Thunder GX Series, with built-in AdobeCharged PhotoEngine™ accelerator, gives you top speed for the most time-consuming Photoshop bottlenecks. Four digital signal processors (DSPs) substantially accelerate Photoshop processing to make your Power Mac even faster and you even more productive.

Real-time CMYK mode acceleration
The Thunder IV GX Series even offers real-time, on-screen CMYK mode acceleration in Photoshop, so you get CMYK that's nearly as fast as RGB.

Thunder/24 GT
The same basic feature set as the Thunder IV GX•1152 but without the built-in Photoshop and CMYK acceleration. Thunder/24 GT is the perfect card to turn any Macintosh into a cost effective, professional design and layout station.

Super Resolution Advantage
Thunder Series saves valuable time with Radius' Dynamic Desktop™ by letting you change display resolution and bit-depth without having to reboot your application. Give your Mac Super Resolution up to 1600 x 1200 at 24-bit depth. And with Radius' Virtual Desktop, the extra resolution and space helps boost productivity by seeing more and doing more. Fast and convenient navigation from accelerated pan and zoom features keep you moving through your work.

Radius ColorComposer Software
Modify your image display without affecting the image file. For a limited time, free ColorComposer software is included with each Thunder Series card. Adjust what you see on your monitor to more closely match the output of your printer.

The absolute best in warranties
Thunder Series comes with an exclusive Lifetime Warranty.[1] If for any reason your Thunder product fails to work as promised, we'll provide free overnight delivery and replacement of a new one. It's all part of Radius' commitment to provide you with hassle-free support programs that minimize downtime and maximize your productivity. Just call (408) 541-5700 or (800) 541-7680 to find out.

For more information on the Thunder Series or any of Radius' products, contact us directly at: Radius, Inc., 215 Moffett Park Drive, Sunnyvale, CA, 94089-1374. Phone (408) 541-6100. Fax information system (800) 966-7360.

radius
SUPERMAC

[1] U.S. and Canada only. Outside North America, contact your local supplier for warranty information.

*No kidding. A Thunder IV GX card on a Power Macintosh 8100 can save you about 50 minutes/day if you work in Photoshop on ten images/day on average. Data available on file at Radius.

Thunder Series Specifications

System Requirements

Any Macintosh or Power Macintosh with a NuBus slot (7" compatible), System 7.1 or later. When using Adobe Photoshop™, version 2.5.1 or later is required. Radius, Apple, SuperMac, NEC or other Macintosh compatible display.

Hardware

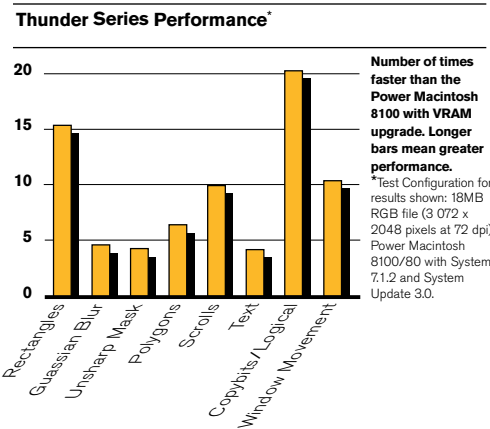|	
Interface:	NuBus 90 block transfer compatible
Display Modes:	1, 4, 8, 16, 24-bits per pixel
Color support:	16.7 million colors from a palette of over 1 billion
Data Path:	32-bit via NuBus; 96-bit internal
Hardware acceleration:	Three Radius custom designed ASICs provide QuickDraw™ acceleration, resolution switching, virtual desktop, and hardware pan and zoom.
Pixel clock:	185 MHz
RAMDAC:	10-bit 3-channel Digital-to-Analog converter
Connector:	15-pin DSUB type female (Macintosh Standard)
Video Output:	RS-343A, Analog RGB, 75 Ohms, sync on green and separate TTL composite, horizontal and vertical sync
Regulatory Compliance:	FCC Class A, VCCI Class 1, Canadian DOC Class A, Energy Star
Environmental:	Conforms to all Macintosh operating conditions
Warranty:	Lifetime Warranty
Software:	**Radius Dynamic Desktop**® provides on-the-fly resolution and bit-depth switching, Pan and Zoom, **Quick Color**™ - enables QuickDraw™ acceleration for Macintosh, and specially tuned for Power Macintosh. Radius Ware and **ColorComposer** color matching software. PhotoEngine System Extension, PhotoEngine Plug-in, PowerSaver for EnergyStar compliance when used with EnergyStar compatible display. Adobe Charged.

Power Consumption

Power Consumption	Bus Voltage	Current Ampres	Power Watts
Thunder IV GX•1600	+5V	5.3	26.5
	+12V	.05	.6
	-12V	.01	.12
Thunder IV GX•1360	+5V	4.9	24.5
	+12V	.05	.6
	-12V	.01	.12
Thunder IV GX•1152	+5V	4.2	21
	+12V	.05	.6
	-12V	.01	.12
Thunder/24 GT	+5V	2.2	11
	+12V	.05	.6
	-12V	.01	.12

Thunder Series Performance*

Number of times faster than the Power Macintosh 8100 with VRAM upgrade. Longer bars mean greater performance.

*Test Configuration for results shown: 18MB RGB file (3 072 x 2048 pixels at 72 dpi). Power Macintosh 8100/80 with System 7.1.2 and System Update 3.0.

Radius Graphics Card

Radius Graphics Card	Video Memory	Maximum Resolutions/ Bits Per Pixel						Photoshop Acceleration		Software and Other Features			
		640 x 480	832 x 624	1024 x 768	1152 x 870	1360 x 870	1600 x 1200	CMYK	Built-in PhotoEngine	Dynamic Desktop	Color-Composer	Pan & Zoom	10-bit DAC
Thunder IV GX•1600 Part number: 0513	6MB	24	24	24	24	24	**24**	■	■	■	■	■	■
Thunder IV GX•1360 Part number: 0446	6MB	24	24	24	24	**24**	8	■	■	■	■	■	■
Thunder IV GX•1152 Part number: 0485	3MB	24	24	24	**24**	8	8	■	■	■	■	■	■
Thunder/24 GT Part number: 0491	3MB	24	24	24	**24**	8	8	Optional	Optional	■	■	■	■

red numbers = screen resolution (native mode)
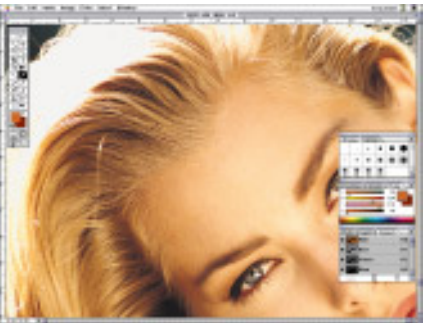
1152 x 870 Standard resolution
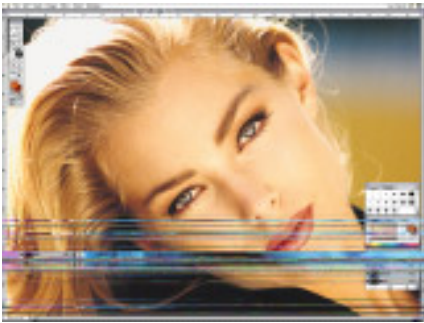
1600 x 1200 with Thunder IV GX•1600 and Dynamic Desktop

For the Radius Authorized Reseller nearest you, call (800) 227-2795. In Canada call (416) 777-9900. For the name of your Radius International Distributor, call (408) 541-6100 or Fax: (408) 541-6150. Radius Inc., 215 Moffett Park Drive, Sunnyvale, CA 94089-1374.

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